

Environmental Effects of the Single Use Bag Ordinance in Austin, Texas

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Recommendation 20150114-003a

- Involve Keep Austin Beautiful and a peer city to estimate the number of single use plastic bags which they have picked up
- Coordinate MRF operators in the City of Austin to perform plastic bag audit on recycling stream from Austin and a community within CAPCOG.
- Identify anecdotal before and after comparison with photographic evidence.
- Inquire about impacts to local retailers about potential economic impacts resulting from ordinance.

Analysis Between
Fort Worth and
Austin, TX





A Comparative Analysis of Litter

A 1:	
Austin	Ft. Worth

Population in 2009	786,386	727,577	
Average number of bags used	335	335	
per year by each American	330		
Number of Single Use Plastic			
Bags in Litter Composition as	0.25	1.00	
Compared to Fort Worth			
Equivalent Number of Single Use	85	220	
Plastic Bags Per Person	60	339	
Number of Single Use Plastic			
Bags used by each city based	263,801,371	246,648,603	
on Population in 2009			
equivalency	66,721,916	246,648,603	
Difference (aka bags reduced)	197,079,454	0	

Before and After Photographic Results

25th of February, 2013



24th of March, 2015



Equivalent Plastic Bag Reduction

- Based on the calculations of the amount of single use plastic bags reduced in the City of Austin, weight savings are equal to:
 - **▶85** Class C Yellow School busses



▶1,707 Bevos



▶6.8 Statue of Liberty's



Recycling Audit of Austin and a Community within CAPCOG



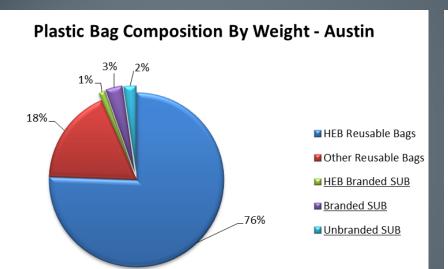
Bag Audit at Texas Disposal Systems

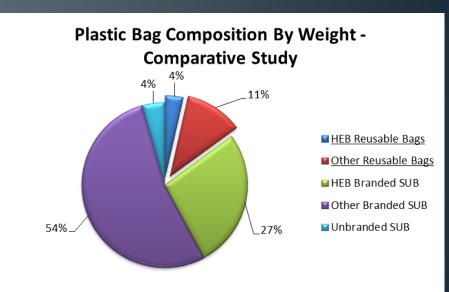






Analyzing the Recycling Stream Community in Austin CAPCOG





- Single use plastic bags represent 6% of the total plastic bags in Austin.
- Reusable plastic bags represent **94**% of the total plastic bags in Austin.
- Single use plastic bags represent 85% of total bags in this CAPCOG community.
- Reusable plastic bags account for the remaining 15% of total plastic bags.

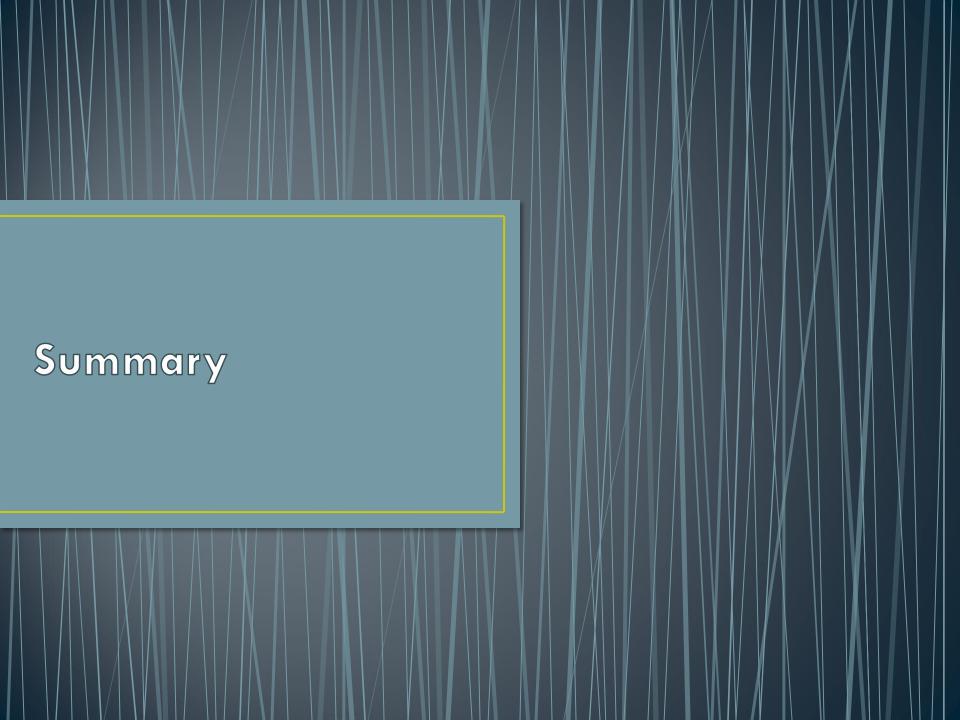
- 1. Number of bags/pound is 5x higher in comparative community
- 2. Total plastic bag composition by weight is similar in both audits
- 3. Single use plastic bags has dramatically decreased.

	TDS	Balcones	Average	Comparative
Total Recycling Processed (Lbs)	70,991	117,490		16,320
Total Number of Baas	470	857		591
Number of Bags per Pound	0.007	0.007	0.007	0.036
Plastic Bags Composition (by weight)	0.052%	0.055%	0.054%	0.071%
Reusable Plastic Bags	0.049%	0.052%	0.050%	0.011%
Single Use Plastic Bags	0.004%	0.003%	0.004%	0.060%



What's Been Observed

- 1. Austin has 75% fewer bags in the littler stream compared to Fort Worth.
 - Single use plastic bags makeup 0.12% of the litter stream in Ft. Worth,
 but only 0.03% in Austin. This is a 75% reduction.
- 2. Austin eliminates approximately 200 million single use plastic bags per year.
- 3. Austin experienced a 15x decrease in the number of single use plastic bags in the recycling stream.
 - CAPCOG community, single use plastic bags make up 0.060% of the recycling stream. In Austin, they are only 0.004%.
- 4. Austin has eliminated 25 tons (50,000 lbs.) of single use plastic bags per year from the recycling stream in Austin.



Considerations and Next Steps

- Continue to educate the consumer on proper recycling practices to remove plastic film (contaminants) from recycling stream.
- Promote retail take-back of plastic bags throughout the City of Austin to increase efficiency of MRF.
- Encourage surrounding communities to adopt a plastic bag ordinances, to alleviate litter concerns and facilitate consumer behavior change.
- Educate consumers on proper bag reuse and cleaning practices to add longevity to reusable bags.
- Elimination of the requirement for the 4 mil reusable bag.



Thank you for your attention! Question/Comments?